

Appendix table 5-25.

Doctoral academic scientists and engineers, by type of position and Carnegie classification and administrative control of institution: 1973–99

(Thousands)

Year	All academic institutions	Research universities	Doctorate-granting	Comprehensive	Medical schools	Liberal arts colleges
Total public and private institutions						
All positions						
1973	118.0	65.2	14.0	21.3	3.3	8.8
1975	134.1	73.4	15.9	24.8	4.3	10.4
1977	145.4	78.2	17.2	26.5	4.9	10.8
1979	155.3	83.5	17.2	26.9	5.9	11.3
1981	167.1	91.0	18.8	30.5	7.2	12.0
1983	176.1	89.9	19.5	31.6	7.0	12.6
1985	190.2	102.8	21.2	35.6	8.3	14.0
1987	195.9	106.9	22.2	36.0	9.0	14.6
1989	206.6	112.5	23.5	38.4	9.7	15.3
1991	210.6	111.6	24.9	39.5	9.6	15.8
1993	213.8	113.0	24.2	39.5	10.8	16.0
1995	217.5	112.8	25.0	41.5	11.2	15.8
1997	232.5	113.6	25.8	42.0	9.8	17.3
1999	240.2	117.2	26.3	43.6	11.9	18.5
Full-time senior faculty						
1973	74.0	41.0	9.3	14.5	1.6	5.6
1975	84.3	45.6	10.9	17.0	2.0	6.3
1977	90.7	48.0	11.6	18.9	2.2	6.6
1979	97.2	50.0	11.6	19.5	2.6	7.2
1981	107.3	55.6	13.4	22.5	3.6	8.1
1983	115.6	56.2	14.5	24.0	3.8	8.4
1985	119.7	61.0	15.0	26.3	4.0	9.3
1987	127.3	65.0	16.4	27.5	4.6	10.3
1989	131.0	66.4	16.4	28.7	4.8	10.8
1991	133.0	65.6	17.0	29.8	4.7	11.2
1993	128.6	62.6	16.2	29.0	5.3	10.9
1995	127.3	61.1	16.0	29.1	5.1	10.7
1997	131.9	61.5	16.9	28.4	4.3	11.1
1999	136.7	64.2	17.4	29.6	5.7	12.3
Full-time junior faculty						
1973	29.3	14.7	3.8	5.8	1.2	2.5
1975	32.1	15.9	3.8	6.1	1.6	3.1
1977	34.9	16.7	4.4	6.3	1.9	3.3
1979	34.0	17.1	4.2	5.6	2.1	2.9
1981	34.6	18.1	3.9	6.3	2.0	2.7
1983	32.8	16.0	3.5	5.2	1.9	2.9
1985	37.2	19.7	3.6	6.0	2.5	3.2
1987	37.2	19.3	3.9	6.3	2.6	3.1
1989	38.7	20.2	4.4	6.5	2.9	3.1
1991	40.1	20.2	5.1	6.8	3.1	2.9
1993	43.8	21.8	5.4	7.4	3.2	3.7
1995	44.0	20.5	5.6	8.2	3.3	3.9
1997	46.4	20.0	5.1	9.2	3.1	4.4
1999	47.4	20.0	5.4	9.9	3.1	4.5
Full-time nonfaculty except postdoctorates						
1973	7.6	4.6	0.4	0.5	0.2	0.4
1975	8.3	5.1	0.6	1.0	0.2	0.6
1977	8.8	5.6	0.5	0.6	0.2	0.5
1979	11.4	7.5	0.8	0.9	0.4	0.7
1981	12.6	8.1	0.8	1.1	0.4	0.8
1983	13.4	8.1	0.7	1.1	0.6	0.7
1985	18.1	11.7	1.6	2.0	0.7	0.9
1987	16.4	11.5	1.1	1.3	0.7	0.7
1989	19.2	13.2	1.3	1.9	1.0	0.8
1991	20.2	13.9	1.7	1.5	0.7	1.0
1993	22.2	14.6	1.7	1.9	1.1	0.9
1995	23.9	15.7	1.9	2.2	1.2	0.8
1997	26.4	15.1	1.9	2.0	0.8	0.9
1999	29.3	16.4	2.0	2.2	1.0	0.9

See explanatory notes, if any, and SOURCE, at end of table.

Appendix table 5-25.

Doctoral academic scientists and engineers, by type of position and Carnegie classification and administrative control of institution: 1973–99
 (Thousands)

Year	All academic institutions	Research universities	Doctorate-granting	Comprehensive	Medical schools	Liberal arts colleges
Postdoctorates						
1973	4.2	3.5	0.2	0.1	0.2	0.0
1975	6.2	5.3	0.2	0.1	0.4	0.0
1977	7.6	6.5	0.3	0.1	0.5	0.1
1979	8.1	6.8	0.3	0.2	0.6	0.1
1981	8.5	7.0	0.3	0.1	1.1	0.0
1983	8.3	6.7	0.2	0.3	0.6	0.0
1985	8.7	7.4	0.3	0.0	0.8	0.1
1987	9.3	8.1	0.2	0.0	0.8	0.0
1989	11.5	9.7	0.5	0.1	0.9	0.1
1991	9.9	8.3	0.3	0.2	0.8	0.0
1993	13.3	11.3	0.5	0.1	1.1	0.0
1995	16.8	13.6	0.8	0.4	1.4	0.1
1997	18.9	13.9	0.9	0.6	1.4	0.1
1999	18.5	14.1	0.8	0.1	1.7	0.2
Part-time positions						
1973	2.9	1.5	0.3	0.4	0.1	0.3
1975	3.2	1.5	0.4	0.5	0.2	0.3
1977	3.4	1.5	0.4	0.6	0.1	0.3
1979	4.5	2.1	0.4	0.8	0.2	0.5
1981	4.0	2.1	0.3	0.6	0.1	0.4
1983	6.0	2.9	0.5	1.0	0.2	0.6
1985	6.5	3.1	0.6	1.2	0.3	0.6
1987	5.7	3.0	0.6	0.9	0.3	0.5
1989	6.2	3.0	0.9	1.2	0.2	0.4
1991	7.4	3.6	0.8	1.2	0.3	0.8
1993	5.9	2.7	0.5	1.0	0.1	0.4
1995	5.5	1.8	0.7	1.6	0.2	0.3
1997	8.9	3.1	1.0	1.7	0.2	0.7
1999	8.2	2.6	0.7	1.8	0.4	0.6
Public universities and colleges						
All positions						
1973	80.9	48.8	10.2	16.2	2.3	1.0
1975	93.0	54.8	11.4	18.8	3.1	1.3
1977	100.4	58.6	12.2	20.4	3.6	1.5
1979	104.3	62.9	11.8	19.9	4.3	1.5
1981	113.9	66.7	13.3	22.4	5.4	1.7
1983	115.9	66.6	13.7	23.6	5.2	1.9
1985	130.2	75.3	15.0	26.2	5.9	2.2
1987	135.3	79.0	15.3	26.8	6.1	2.5
1989	141.2	81.7	16.5	28.2	6.6	2.7
1991	142.6	80.8	17.3	28.4	6.8	2.6
1993	144.6	81.9	16.9	28.9	7.4	2.6
1995	145.7	80.8	17.7	30.2	7.7	2.4
1997	148.7	82.9	18.4	31.0	6.4	3.0
1999	153.1	83.6	18.5	31.5	8.2	2.7
Full-time senior faculty						
1973	52.4	31.8	6.9	11.0	1.1	0.6
1975	60.2	35.4	8.1	12.9	1.4	0.7
1977	65.2	37.7	8.5	14.6	1.6	0.9
1979	66.9	39.2	8.1	14.7	1.9	1.0
1981	76.2	43.3	9.7	17.0	2.7	1.2
1983	79.7	44.3	10.4	18.2	2.9	1.3
1985	85.0	47.2	10.6	19.8	3.0	1.5
1987	90.7	50.7	11.6	20.5	3.3	1.8
1989	92.6	51.5	11.6	21.3	3.3	1.8
1991	93.7	50.8	12.1	21.9	3.5	2.0
1993	90.6	48.5	11.6	21.5	3.8	2.0
1995	88.7	47.1	11.6	21.4	3.7	1.6
1997	89.8	48.3	12.3	21.0	3.0	2.0
1999	92.5	48.7	12.5	21.6	4.0	1.9

See explanatory notes, if any, and SOURCE, at end of table.

Appendix table 5-25.

Doctoral academic scientists and engineers, by type of position and Carnegie classification and administrative control of institution: 1973–99

(Thousands)

Year	All academic institutions	Research universities	Doctorate-granting	Comprehensive	Medical schools	Liberal arts colleges
Full-time junior faculty						
1973	20.4	11.0	2.7	4.5	0.9	0.3
1975	22.1	11.8	2.6	4.9	1.2	0.4
1977	23.7	12.4	2.9	4.9	1.4	0.4
1979	22.4	12.8	2.8	3.8	1.4	0.3
1981	22.7	12.5	2.7	4.2	1.5	0.4
1983	20.2	11.2	2.3	3.7	1.3	0.5
1985	24.1	13.9	2.5	4.1	1.6	0.4
1987	25.0	14.0	2.6	4.5	1.6	0.5
1989	25.4	14.2	3.1	4.6	1.8	0.5
1991	25.8	13.7	3.5	4.6	2.0	0.5
1993	27.9	14.9	3.6	5.2	2.1	0.5
1995	28.3	14.0	3.8	6.0	2.4	0.6
1997	28.2	13.7	3.7	6.6	1.9	0.7
1999	29.4	13.8	3.7	7.1	2.0	0.6
Full-time nonfaculty except postdoctorates						
1973	4.1	3.0	0.3	0.4	0.2	0.0
1975	5.2	3.3	0.4	0.7	0.1	0.1
1977	5.1	3.7	0.3	0.4	0.2	0.1
1979	7.4	5.1	0.6	0.8	0.4	0.1
1981	8.0	5.4	0.6	0.9	0.3	0.1
1983	7.8	5.4	0.5	0.9	0.4	0.1
1985	11.9	7.9	1.3	1.4	0.4	0.2
1987	10.2	7.3	0.7	1.0	0.4	0.2
1989	12.5	8.5	0.9	1.4	0.7	0.2
1991	13.4	9.4	1.1	1.3	0.5	0.1
1993	14.1	9.4	1.0	1.4	0.8	0.1
1995	15.3	10.2	1.3	1.7	0.8	0.1
1997	15.4	10.7	1.4	1.6	0.5	0.2
1999	16.5	11.5	1.3	1.6	0.6	0.2
Postdoctorates						
1973	2.3	2.0	0.1	0.1	0.1	0.0
1975	3.6	3.1	0.1	0.1	0.3	0.0
1977	4.4	3.8	0.2	0.0	0.3	0.0
1979	4.8	4.1	0.1	0.1	0.5	0.0
1981	4.8	3.9	0.1	0.1	0.8	0.0
1983	4.6	3.7	0.2	0.2	0.4	0.0
1985	4.7	4.0	0.2	0.0	0.6	0.0
1987	5.3	4.5	0.1	0.0	0.5	0.0
1989	6.4	5.3	0.3	0.1	0.6	0.1
1991	5.3	4.3	0.2	0.2	0.5	0.0
1993	8.2	7.0	0.4	0.1	0.7	0.0
1995	9.9	8.1	0.5	0.3	0.8	0.0
1997	9.8	8.0	0.5	0.5	0.8	0.0
1999	9.9	7.9	0.6	0.1	1.2	0.0
Part-time positions						
1973	1.6	1.0	0.2	0.2	0.1	0.0
1975	2.0	1.1	0.2	0.3	0.1	0.0
1977	2.1	1.1	0.2	0.4	0.1	0.0
1979	2.8	1.6	0.2	0.5	0.1	0.0
1981	2.3	1.5	0.2	0.3	0.1	0.0
1983	3.7	2.0	0.4	0.7	0.2	0.0
1985	4.4	2.3	0.4	0.9	0.2	0.1
1987	4.1	2.5	0.3	0.7	0.2	0.0
1989	4.2	2.3	0.6	0.8	0.2	0.1
1991	4.4	2.6	0.4	0.5	0.2	0.1
1993	3.9	2.0	0.2	0.6	0.1	0.1
1995	3.5	1.4	0.4	0.9	0.0	0.0
1997	5.6	2.3	0.5	1.3	0.1	0.1
1999	4.9	1.7	0.3	1.2	0.3	0.1

See explanatory notes, if any, and SOURCE, at end of table.

Appendix table 5-25.

Doctoral academic scientists and engineers, by type of position and Carnegie classification and administrative control of institution: 1973–99
 (Thousands)

Year	All academic institutions	Research universities	Doctorate-granting	Comprehensive	Medical schools	Liberal arts colleges
Private universities and colleges						
All positions						
1973	34.7	16.4	3.8	5.1	0.9	7.8
1975	40.0	18.6	4.5	5.9	1.2	9.1
1977	42.2	19.6	5.0	6.2	1.3	9.3
1979	45.0	20.6	5.4	7.0	1.5	9.8
1981	51.0	24.4	5.5	8.2	1.8	10.4
1983	50.3	23.2	5.8	8.0	1.8	10.6
1985	58.3	27.5	6.2	9.4	2.3	11.8
1987	60.2	27.9	6.9	9.2	2.9	12.1
1989	65.1	30.8	7.1	10.1	3.1	12.6
1991	67.0	30.8	7.5	11.1	2.8	13.2
1993	67.1	31.1	7.3	10.6	3.4	13.4
1995	68.7	32.0	7.3	11.2	3.4	13.4
1997	68.8	30.7	7.4	11.0	3.5	14.3
1999	74.8	33.6	7.9	12.1	3.7	15.8
Full-time senior faculty						
1973	21.0	9.3	2.4	3.5	0.4	5.0
1975	23.6	10.1	2.8	4.1	0.5	5.6
1977	24.3	10.3	3.1	4.3	0.6	5.6
1979	26.2	10.7	3.4	4.8	0.7	6.1
1981	29.8	12.4	3.7	5.5	0.9	6.9
1983	30.2	11.9	4.1	5.8	0.9	7.1
1985	34.0	13.7	4.4	6.5	1.0	7.8
1987	36.4	14.2	4.8	7.0	1.3	8.5
1989	38.3	14.9	4.8	7.4	1.4	9.0
1991	39.1	14.8	4.9	8.0	1.3	9.2
1993	37.2	14.1	4.6	7.5	1.5	8.9
1995	37.3	14.1	4.4	7.7	1.5	9.1
1997	36.6	13.3	4.5	7.4	1.2	9.1
1999	41.3	15.5	4.9	8.0	1.6	10.4
full-time junior faculty						
1973	8.7	3.7	1.1	1.2	0.4	2.1
1975	9.8	4.1	1.3	1.3	0.4	2.7
1977	10.8	4.2	1.5	1.4	0.5	2.9
1979	10.7	4.3	1.4	1.8	0.6	2.6
1981	11.7	5.6	1.2	2.1	0.5	2.3
1983	10.6	4.8	1.2	1.5	0.5	2.4
1985	12.6	5.8	1.1	1.9	0.8	2.8
1987	12.0	5.3	1.3	1.8	1.0	2.5
1989	13.2	6.1	1.3	1.9	1.1	2.6
1991	14.1	6.5	1.6	2.2	1.0	2.4
1993	15.5	6.9	1.7	2.2	1.1	3.2
1995	15.1	6.5	1.7	2.2	1.0	3.4
1997	15.7	6.3	1.4	2.6	1.2	3.8
1999	16.1	6.1	1.7	2.9	1.1	3.9
Full-time nonfaculty except postdoctorates						
1973	2.3	1.6	0.1	0.2	0.1	0.3
1975	2.9	1.8	0.2	0.3	0.1	0.5
1977	2.9	1.9	0.2	0.2	0.1	0.4
1979	3.4	2.4	0.2	0.2	0.0	0.6
1981	4.3	2.7	0.2	0.2	0.1	0.7
1983	4.2	2.7	0.2	0.3	0.1	0.6
1985	5.9	3.8	0.3	0.7	0.2	0.7
1987	6.1	4.3	0.5	0.2	0.3	0.6
1989	6.6	4.7	0.4	0.5	0.2	0.6
1991	6.6	4.5	0.6	0.2	0.2	0.9
1993	7.7	5.2	0.7	0.5	0.3	0.8
1995	7.8	5.5	0.6	0.5	0.4	0.6
1997	6.6	4.4	0.5	0.5	0.3	0.6
1999	7.4	4.9	0.6	0.6	0.4	0.7

See explanatory notes, if any, and SOURCE, at end of table.

Appendix table 5-25.

Doctoral academic scientists and engineers, by type of position and Carnegie classification and administrative control of institution: 1973–99

(Thousands)

Year	All academic institutions	Research universities	Doctorate-granting	Comprehensive	Medical schools	Liberal arts colleges
Postdoctorates						
1973	1.6	1.4	0.1	0.0	0.0	0.0
1975	2.5	2.1	0.1	0.0	0.2	0.0
1977	3.2	2.8	0.1	0.0	0.2	0.1
1979	3.2	2.7	0.2	0.1	0.2	0.1
1981	3.7	3.1	0.3	0.0	0.3	0.0
1983	3.3	2.9	0.1	0.0	0.2	0.0
1985	3.8	3.4	0.1	0.0	0.2	0.1
1987	4.0	3.6	0.1	0.0	0.3	0.0
1989	5.0	4.4	0.2	0.0	0.3	0.1
1991	4.5	4.0	0.1	0.0	0.3	0.0
1993	4.9	4.3	0.1	0.0	0.4	0.0
1995	6.6	5.5	0.3	0.1	0.5	0.1
1997	7.4	5.9	0.5	0.1	0.7	0.1
1999	7.1	6.2	0.2	0.1	0.5	0.2
Part-time positions						
1973	1.1	0.5	0.1	0.2	0.0	0.2
1975	1.2	0.4	0.2	0.2	0.0	0.3
1977	1.1	0.4	0.2	0.2	0.0	0.2
1979	1.5	0.5	0.2	0.2	0.1	0.4
1981	1.6	0.6	0.2	0.3	0.0	0.4
1983	2.0	0.9	0.2	0.3	0.1	0.5
1985	1.9	0.8	0.2	0.2	0.1	0.4
1987	1.6	0.5	0.3	0.2	0.1	0.4
1989	1.9	0.8	0.3	0.4	0.0	0.4
1991	2.8	1.0	0.3	0.7	0.1	0.6
1993	1.8	0.6	0.3	0.4	0.1	0.4
1995	1.8	0.4	0.3	0.7	0.1	0.2
1997	2.6	0.9	0.5	0.5	0.1	0.6
1999	2.8	0.9	0.4	0.6	0.1	0.5

NOTES: Employment at institutions without a Carnegie code or with unknown administrative control is included only in total. Free-standing schools of engineering and technology are shown with comprehensive institutions. Institutions are designated by the 1994 Carnegie classification code. See Carnegie Foundation for the Advancement of Teaching, *A Classification of Institutions of Higher Education* (Princeton, NJ, Princeton University Press, 1994). Junior faculty includes assistant professors and instructors; senior faculty includes full and associate professors. Data excludes those with foreign-earned doctorates.

SOURCE: National Science Foundation, Division of Science Resources Statistics (NSF/SRS), Survey of Doctorate Recipients, unpublished tabulations.